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tcagcaaaca cacccagage tacccaacag actcctatgg gattcttgaa ttccagggtg
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ggggttactc caataaagcc atg tac atc cga gtc tcc tac gac acc aag cca
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                      Met Tyr Ile Arg Val Ser Tyr Asp Thr Lys Pro
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gat tee etg etc cae etc atg gtg aag gae tgg eag etg gag etc eeg
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Asp Ser Leu Leu His Leu Met Val Lys Asp Trp Gln Leu Glu Leu Pro
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225

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Ala Glu Cys Asn Ser Ser Pro His Leu Ser Gln Thr Asp Ile Thr Pro
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cet etg cee tgacacccag tgcaggget cetagettte acatgcagee
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Pro Leu Pro
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attracateg ceteteaaga etgggeeagg eagtgeaace tgteaageat gtetgteete
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coetectice tacaatagee ecceetetgg geoceatgee tetgetetet cagecegtte
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tectececae tgateactgg egeteetgtt gtetteeaag geaaggaaca aggaaaagea
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Val Phe Gly Lys Gly Leu Ile Lys Ala Ala Met Thr Thr Gly Ala Trp
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                                             60
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Ile Phe Thr Gly Gly Val Ser Thr Gly Val Val Ser His Val Gly Asp
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Ala Leu Lys Asp His Ser Ser Lys Ser Arg Gly Arg Leu Cys Ala Ile
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Gly Ile Ala Pro Trp Gly Met Val Glu Asn Lys Glu Asp Leu Ile Gly
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Lys Asp Val Thr Arg Val Tyr Gln Thr Met Ser Asn Pro Leu Ser Lys
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Leu Ser Val Leu Asn Asn Ser His Thr His Phe Ile Leu Ala Asp Asn
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Gly Thr Leu Gly Lys Tyr Gly Ala Glu Val Lys Leu Arg Arg Gln Leu
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Glu Lys His Ile Ser Leu Gln Lys Ile Asn Thr Arg Leu Gly Gln Gly
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Val Pro Val Val Gly Leu Val Val Glu Gly Gly Pro Asn Val Val Ser
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            180
                                                     190
Ile Val Leu Glu Tyr Leu Lys Glu Asp Pro Pro Val Pro Val Val Val
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                            200
                                                 205
Cys Asp Gly Ser Gly Arg Ala Ser Asp Ile Leu Ser Phe Ala His Lys
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235

220

215

230

Tyr Cys Asp Glu Gly Gly Val Ile Asn Glu Ser Leu Arg Asp Gln Leu

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Thr Val Phe Arg Met Gly Ser Glu Gly Gln Gln Asp Val Glu Met Ala
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Ile Leu Thr Ala Leu Leu Lys Gly Thr Asn Ala Ser Ala Pro Asp Gln
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Leu Ser Leu Ala Leu Ala Trp Asn Arg Val Asp Ile Ala Arg Ser Gln
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Ile Phe Val Phe Gly Pro His Trp Pro Pro Leu Gly Ser Leu Ala Pro
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               325
Pro Val Asp Thr Lys Ala Ala Glu Lys Glu Lys Lys Pro Pro Thr Ala
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Thr Thr Lys Gly Arg Gly Lys Gly Lys Gly Lys Lys Gly Lys Val
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Lys Glu Glu Val Glu Glu Glu Thr Asp Pro Arg Lys Leu Glu Leu Leu
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Asn Trp Val Asn Ala Leu Glu Gln Ala Met Leu Asp Ala Leu Val Leu
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Asp Arq Val Asp Phe Val Lys Leu Leu Ile Glu Asn Gly Val Asn Met
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Gln His Phe Leu Thr Ile Pro Arg Leu Glu Glu Leu Tyr Asn Thr Arg
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Leu Gly Pro Pro Asn Thr Leu His Leu Leu Val Arg Asp Val Lys Lys
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Ser Asn Leu Pro Pro Asp Tyr His Ile Ser Leu Ile Asp Ile Gly Leu
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Lys Ser Phe Arg Thr Leu Tyr Asn Asn Leu Phe Gly Pro Lys Arg Val
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Glu Leu Ser Arg His Thr Val Ser Cys Ala Ser Gln Ser Asn Met Trp
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                                                  Met Tyr Ile Arg
gta too tat gac acc aag coa gac toa ctg ctc cat ctc atg qtg aaa
                                                                      405
Val Ser Tyr Asp Thr Lys Pro Asp Ser Leu Leu His Leu Met Val Lys
gat tgg cag ctg gaa ctc ccc aag ctc tta ata tct gtg cat gga ggc
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Asp Trp Gln Leu Glu Leu Pro Lys Leu Leu Ile Ser Val His Gly Gly
ctc cag aac ttt gag atg cag ccc aag ctg aaa caa gtc ttt ggg aaa
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Leu Gln Asn Phe Glu Met Gln Pro Lys Leu Lys Gln Val Phe Gly Lys
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ggc ctg atc aag gct gct atg acc acc ggg gcc tgg atc ttc acc qqq
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Gly Leu Ile Lys Ala Ala Met Thr Thr Gly Ala Trp Ile Phe Thr Gly
ggt gtc agc aca ggt gtt atc agc cac gta ggg gat gcc ttg aaa gac
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Gly Val Ser Thr Gly Val Ile Ser His Val Gly Asp Ala Leu Lys Asp
cac tcc tcc aag tcc aga ggc cgg gtt tgt gct ata gga att gct cca
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His Ser Ser Lys Ser Arg Gly Arg Val Cys Ala Ile Gly Ile Ala Pro
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tgg ggc atc gtg gag aat aag gaa gac ctg gtt gga aag gat gta aca
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Trp Gly Ile Val Glu Asn Lys Glu Asp Leu Val Gly Lys Asp Val Thr
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aac aac tcc cac acc cac ttc atc ctg gct gac aat ggc acc ctg ggc
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Asn Asn Ser His Thr His Phe Ile Leu Ala Asp Asn Gly Thr Leu Gly
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Lys Tyr Gly Ala Glu Val Lys Leu Arg Arg Leu Leu Glu Lys His Ile
tcc ctc cag aag atc aac aca aga ctg ggg cag ggc gtg ccc ctc gtg
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Ser Leu Gln Lys Ile Asn Thr Arg Leu Gly Gln Gly Val Pro Leu Val
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4

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-_

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j.

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Glu Lys His Ile Ser Leu Gln Lys Ile Asn Thr Arg Leu Gly Gln Gly Val Pro Leu Val Gly Leu Val Val Glu Gly Pro Asn Val Val Ser Ile Val Leu Glu Tyr Leu Gln Glu Glu Pro Pro Ile Pro Val Val Ile Cys Asp Gly Ser Gly Arg Ala Ser Asp Ile Leu Ser Phe Ala His Lys Tyr Cys Glu Glu Gly Gly Ile Ile Asn Glu Ser Leu Arg Glu Gln Leu Leu Val Thr Ile Gln Lys Thr Phe Asn Tyr Asn Lys Ala Gln Ser His Gln Leu Phe Ala Ile Ile Met Glu Cys Met Lys Lys Glu Leu Val Thr Val Phe Arg Met Gly Ser Glu Gly Gln Gln Asp Ile Glu Met Ala Ile Leu Thr Ala Leu Leu Lys Gly Thr Asn Val Ser Ala Pro Asp Gln Leu Ser Leu Ala Leu Ala Trp Asn Arg Val Asp Ile Ala Arg Ser Gln Ile Phe Val Phe Gly Pro His Trp Thr Pro Leu Gly Ser Leu Ala Pro Pro Thr Asp Ser Lys Ala Thr Glu Lys Glu Lys Lys Pro Pro Met Ala Thr Thr Lys Gly Gly Arg Gly Lys Gly Lys Gly Lys Lys Lys Gly Lys Val Lys Glu Glu Val Glu Glu Glu Thr Asp Pro Arg Lys Ile Glu Leu Leu Asn Trp Val Asn Ala Leu Glu Gln Ala Met Leu Asp Ala Leu Val Leu Asp Arg Val Asp Phe Val Lys Leu Leu Ile Glu Asn Gly Val Asn Met Gln His Phe Leu Thr Ile Pro Arg Leu Glu Glu Leu Tyr Asn Thr Arg Leu Gly Pro Pro Asn Thr Leu His Leu Leu Val Arg Asp Val Lys Lys Ser Asn Leu Pro Pro Asp Tyr His Ile Ser Leu Ile Asp Ile Gly Leu Val Leu Glu Tyr Leu Met Gly Gly Ala Tyr Arg Cys Asn Tyr Thr Arg Lys Asn Phe Arg Thr Leu Tyr Asn Asn Leu Phe Gly Pro Lys Arg Pro Lys Ala Leu Lys Leu Leu Gly Met Glu Asp Asp Glu Pro Pro Ala **05** Lys Gly Lys Lys Lys Lys Lys Lys Lys Glu Glu Glu Ile Asp Ile Asp Val Asp Asp Pro Ala Val Ser Arg Phe Gln Tyr Pro Phe His Glu Leu Met Val Trp Ala Val Leu Met Lys Arg Gln Lys Met Ala Val Phe Leu Trp Gln Arg Gly Glu Glu Ser Met Ala Lys Ala Leu Val Ala Cys Lys Leu Tyr Lys Ala Met Ala His Glu Ser Ser Glu Ser Asp Leu Val **5** Asp Asp Ile Ser Gln Asp Leu Asp Asn Asn Ser Lys Asp Phe Gly Gln Leu Ala Leu Glu Leu Leu Asp Gln Ser Tyr Lys His Asp Glu Gln Ile Ala Met Lys Leu Leu Thr Tyr Glu Leu Lys Asn Trp Ser Asn Ser Thr Cys Leu Lys Leu Ala Val Ala Ala Lys His Arg Asp Phe Ile Ala His

Thr Cys Ser Gln Met Leu Leu Thr Asp Met Trp Met Gly Arg Leu Arg Met Arg Lys Asn Pro Gly Leu Lys Val Ile Met Gly Ile Leu Leu Pro Pro Thr Ile Leu Phe Leu Glu Phe Arg Thr Tyr Asp Asp Phe Ser Tyr Gln Thr Ser Lys Glu Asn Glu Asp Gly Lys Glu Lys Glu Glu Glu Asn Thr Asp Ala Asn Ala Asp Ala Gly Ser Arg Lys Gly Asp Glu Glu Asn Glu His Lys Lys Gln Arg Ile Ile Pro Ile Gly Thr Lys Ile Cys Lys Phe Tyr Asn Ala Pro Ile Val Lys Phe Trp Phe Tyr Thr Ile Ser Tyr Leu Gly Tyr Leu Leu Leu Phe Asn Tyr Val Ile Leu Val Arg Met Asp Gly Trp Pro Ser Leu Gln Glu Trp Ile Val Ile Ser Tyr Ile Val Ser Leu Ala Leu Glu Lys Ile Arg Glu Ile Leu Met Ser Glu Pro Gly Lys Leu Ser Gln Lys Ile Lys Val Trp Leu Gln Glu Tyr Trp Asn Ile Thr Asp Leu Val Ala Ile Ser Thr Phe Met Ile Gly Ala Met Ala Thr Arg Ser Val Met Met Ile Gly Lys Met Met Ile Asp Met Leu Tyr Phe Val **55** Val Ile Met Leu Val Val Leu Met Ser Phe Gly Val Ala Arg Gln Ala Ile Leu His Pro Glu Glu Lys Pro Ser Trp Lys Leu Ala Arg Asn Ile Phe Tyr Met Pro Tyr Trp Met Ile Tyr Gly Glu Val Phe Ala Asp Gln Ile Asp Leu Tyr Ala Met Glu Ile Asn Pro Pro Cys Gly Glu Asn Leu Tyr Asp Glu Glu Gly Lys Arg Leu Pro Pro Cys Ile Pro Gly Ala Trp Leu Thr Pro Ala Leu Met Ala Cys Tyr Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile Ala Val Phe Asn Asn Thr Phe Phe Glu Val Lys Ser Ile Ser Asn Gln Val Trp Lys Phe Gln Arg Tyr Gln Leu Ile Met Thr Phe His Asp Arg Pro Val Leu Pro Pro Pro Met Ile Ile Leu Ser His Ile Tyr Ile Ile Ile Met Arg Leu Ser Gly Arg Cys Arg Lys Lys Arg Glu Gly Asp Gln Glu Glu Arg Asp Arg Gly Leu Lys Leu Phe Leu Ser Asp Glu Glu Leu Lys Arg Leu His Glu Phe Glu Glu Gln Cys Val Gln Glu His Phe Arg Glu Lys Glu Asp Glu Gln Gln Ser Ser Ser Asp Glu Arg Ile Arg Val Thr Ser Glu Arg Val Glu Asn Met Ser Met Arg Leu Glu Glu Ile Asn Glu Arg Glu Thr Phe Met Lys Thr Ser Leu Gln Thr Val Asp Leu Arg Leu Ala Gln Leu Glu Glu Leu Ser Asn Arg Met Val Asn Ala Leu Glu Asn Leu Ala Gly Ile Asp Arg Ser Asp Leu Ile Gln Ala Arg Ser Arg Ala Ser Ser Glu Cys Glu Ala Thr Tyr Leu

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Met	aca Thr	ttt Phe	cat His	gac Asp	Arg	cca Pro 1035	gtc Val	ctg Leu	ccc Pro	Pro	ccg Pro 1040	atg Met	atc Ile	att Ile	tta Leu	3.	477
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